

WHAT IS CLAIMED IS:

1. A method for managing a plurality of failures in a video and data network comprising:
 - discovering a failure in the video and data network;
 - correlating the failure with the plurality of failures to determine related failures;
 - isolating a root cause of the failure;
 - suppressing the related failures that were generated as a result of the root cause failure;
 - determining if the root cause is automatically resolvable; and
 - if the root cause is automatically resolvable, resolving the root cause.
2. The method of claim 1, wherein the video and data network comprises a Digital Subscriber Line (xDSL) network.
3. The method of claim 1, wherein the video and data network comprises a Very high bit rate DSL (VDSL) network.
4. The method of claim 1, further comprising creating a repair ticket for the failure.
5. The method of claim 1, wherein correlating the failure comprises:
 - interacting with a physical network transport inventory; and
 - determining upstream and downstream physical network elements from the failure.
6. The method of claim 5, wherein correlating the failure comprises:
 - interacting with a virtual network transport inventory; and
 - determining upstream and downstream virtual network elements from the failure.
7. The method of claim 6, wherein correlating the failure comprises:
 - correlating related failures from the upstream and downstream physical and virtual network elements with the failure.

1 8. The method of claim 1, wherein isolating the root cause of the failure
2 comprises gathering performance data.

1 9. The method of claim 1, wherein isolating the root cause of the failure
2 comprises performing tests on the video and data network.

1 10. The method of claim 9, wherein performing tests on the network
2 comprises performing a physical connectivity test.

1 11. The method of claim 10, wherein the physical connectivity test
2 comprises a Physical Loop Test.

1 12. The method of claim 9, wherein performing tests on the video and data
2 network comprises performing a virtual connectivity test.

1 13. The method of claim 12, wherein the physical connectivity test
2 comprises an Operations And Maintenance (OAM) test.

1 14. The method of claim 1, further comprising determining one or more
2 user's affected by the failure.

1 15. The method of claim 14, wherein determining one or more user's
2 affected by the failure comprises using customer data to correlate the one or more users to the
3 root cause.

1 16. The method of claim 1, further comprising notifying the one or more
2 user's affected by the root cause.

1 17. The method of claim 1, further comprising opening a repair ticket in
2 one or more records of the one or more user's affected by the root cause.

1 18. The method of claim 17, further comprising determining when the root
2 cause was resolved.

1 19. The method of claim 18, further comprising closing the repair ticket in
2 the one or more records of the one or more user's affected by the root cause when the root
3 cause has been resolved.

1 20. The method of claim 19, wherein notifying the one or more user's
2 affected by the root cause when the root cause is resolved.

1 21. The method of claim 20, further comprising validating the resolution
2 of the root cause.

1 22. The method of claim 21, wherein validating the resolution of the
2 failure comprises testing a physical connectivity of the video and data network.

1 23. The method of claim 21, wherein validating the resolution of the
2 failure comprises testing a virtual connectivity of the video and data network.

1 24. The method of claim 1, further comprising storing the root cause and
2 failure in a history of failures.